

Signs of the Times

Signs of the Times was written in 1829 and appeared anonymously in the *Edinburgh Review* for June of that year. It is the first of Carlyle's essays on social themes, and although he himself referred to it as, 'Bad in general, but the best I could make it', it is in fact a remarkably effective attack on the acceptance of utilitarian values by many of his contemporaries. Although *Signs of the Times* was not publicly acknowledged as Carlyle's until ten years later, his responsibility for it was known at the time of its publication. The essay can be regarded as the first great protest against attitudes that were to provide a dogma for Victorian materialism, anticipating works like Ruskin's *Unto This Last* and Matthew Arnold's *Culture and Anarchy*. It is reprinted here complete.

Signs of the Times

IT is no very good symptom either of nations or individuals, that they deal much in vaticination.¹ Happy men are full of the present, for its bounty suffices them; and wise men also, for its duties engage them. Our grand business undoubtedly is, not to *see* what lies dimly at a distance, but to *do* what lies clearly at hand.

Know'st thou *Yesterday*, its aim and reason;
Work'st thou well *Today*, for worthy things?
Calmly wait the *Morrow's* hidden season,
Need'st not fear what hap soe'er it brings.²

But man's 'large discourse of reason' will look 'before and after;' and, impatient of the 'ignorant present time,' will indulge in anticipation far more than profits him. Seldom can the unhappy be persuaded that the evil of the day is sufficient for it; and the ambitious will not be content with present splendour, but paints yet more glorious triumphs, on the cloud-curtain of the future.

The case, however, is still worse with nations. For here the prophets are not one, but many; and each incites and confirms the other; so that the fatidical³ fury spreads wider and wider, till at last even Saul must join in it. For there is still a real magic in the action and reaction of minds on one another. The casual delirium⁴ of a few becomes, by this mysterious reverberation, the frenzy of many; men lose the use, not only of their understandings, but of their bodily senses; while the most obdurate unbelieving hearts melt, like the rest, in the furnace where all are cast as victims and as fuel. It is grievous to think, that this noble omnipotence of Sympathy has been so rarely the Aaron's-rod⁵ of Truth and Virtue, and so often the Enchanter's-rod of Wickedness and Folly! No solitary miscreant, scarcely any solitary maniac, would venture on such actions and imaginations, as large communities of sane men have, in such circumstances, entertained as

sound wisdom. Witness long scenes of the French Revolution, in these late times ! Levity is no protection against such visitations, nor the utmost earnestness of character. The New-England Puritan burns witches, wrestles for months with the horrors of Satan's invisible world, and all ghastly phantasms, the daily and hourly precursors of the Last Day ; then suddenly bethinks him that he is frantic, weeps bitterly, prays contritely, and the history of that gloomy season lies behind him like a frightful dream.

Old England too has had her share of such frenzies and panics ; though happily, like other old maladies, they have grown milder of late : and since the days of Titus Oates have mostly passed without loss of men's lives ; or indeed without much other loss than that of reason, for the time, in the sufferers. In this mitigated form, however, the distemper is of pretty regular recurrence ; and may be reckoned on at intervals, like other natural visitations ; so that reasonable men deal with it, as the Londoners do with their fogs, – go cautiously out into the groping crowd, and patiently carry lanterns at noon ; knowing, by a well-grounded faith, that the sun is still in existence, and will one day reappear. How often have we heard, for the last fifty years, that the country was wrecked, and fast sinking ; whereas, up to this date, the country is entire and afloat ! The 'State in Danger' is a condition of things, which we have witnessed a hundred times ; and as for the Church, it has seldom been out of 'danger' since we can remember it.

All men are aware that the present is a crisis of this sort ; and why it has become so. The repeal of the Test Acts, and then of the Catholic disabilities,⁶ has struck many of their admirers with an indescribable astonishment. Those things seemed fixed and immovable ; deep as the foundations of the world ; and lo, in a moment they have vanished, and their place knows them no more ! Our worthy friends mistook the slumbering Leviathan for an island ; often as they had been assured, that Intolerance was, and could be nothing but a Monster ; and so, mooring under the lee, they had anchored comfortably in his scaly rind, thinking to take good cheer ; as for some space they did. But now their Leviathan has suddenly dived under ; and they can no longer be fastened in the stream of time ; but must drift forward on it, even like the

rest of the world: no very appalling fate, we think, could they but understand it; which, however, they will not yet, for a season. Their little island is gone; sunk deep amid confused eddies; and what is left worth caring for in the universe? What is it to them that the great continents of the earth are still standing; and the polestar and all our loadstars, in the heavens, still shining and eternal? Their cherished little haven is gone, and they will not be comforted! And therefore, day after day, in all manner of periodical or perennial publications, the most lugubrious predictions are sent forth. The King has virtually abdicated; the Church is a widow, without jointure; public principle is gone; private honesty is going; society, in short, is fast falling in pieces; and a time of unmingled evil is come on us.

At such a period, it was to be expected that the rage of prophecy should be more than usually excited. Accordingly, the Millennarians have come forth on the right hand, and the Millites on the left. The Fifth-monarchy men⁷ prophesy from the Bible, and the Utilitarians from Bentham. The one announces that the last of the seals is to be opened, positively, in the year 1860; and the other assures us that 'the greatest-happiness principle' is to make a heaven of earth, in a still shorter time. We know these symptoms too well, to think it necessary or safe to interfere with them. Time and the hours will bring relief to all parties. The grand encourager of Delphic or other noises is – the Echo. Left to themselves, they will the sooner dissipate, and die away in space.

Meanwhile, we too admit that the present is an important time; as all present time necessarily is. The poorest Day that passes over us is the conflux of two Eternities; it is made up of currents that issue from the remotest Past, and flow onwards into the remotest Future. We were wise indeed, could we discern truly the signs of our own time; and by knowledge of its wants and advantages, wisely adjust our own position in it. Let us, instead of gazing idly into the obscure distance, look calmly around us, for a little, on the perplexed scene where we stand. Perhaps, on a more serious inspection, something of its perplexity will disappear, some of its distinctive characters and deeper tendencies more

clearly reveal themselves; whereby our own relations to it, our own true aims and endeavours in it, may also become clearer.

Were we required to characterise this age of ours by any single epithet, we should be tempted to call it, not an Heroical, Devotional, Philosophical, or Moral Age, but, above all others, the Mechanical Age. It is the Age of Machinery, in every outward and inward sense of that word; the age which, with its whole undivided might, forwards, teaches and practises the great art of adapting means to ends. Nothing is now done directly, or by hand; all is by rule and calculated contrivance. For the simplest operation, some helps and accompaniments, some cunning abbreviating process is in readiness. Our old modes of exertion are all discredited, and thrown aside. On every hand, the living artisan is driven from his workshop, to make room for a speedier, inanimate one. The shuttle drops from the fingers of the weaver, and falls into iron fingers that ply it faster. The sailor furls his sail, and lays down his oar; and bids a strong, unwearied servant, on vaporous wings, bear him through the waters. Men have crossed oceans by steam; the Birmingham Fire-king has visited the fabulous East;⁸ and the genius of the Cape, were there any Camoens⁹ now to sing it, has again been alarmed, and with far stranger thunder than Gama's. There is no end to machinery. Even the horse is stripped of his harness, and finds a fleet fire-horse yoked in his stead. Nay, we have an artist that hatches chickens by steam; the very brood-hen is to be superseded! For all earthly, and for some unearthly purposes, we have machines and mechanic furtherances; for mincing our cabbages; for casting us into magnetic sleep. We remove mountains, and make seas our smooth highway; nothing can resist us. We war with rude Nature; and, by our resistless engines, come off always victorious, and loaded with spoils.

What wonderful accessions have thus been made, and are still making, to the physical power of mankind; how much better fed, clothed, lodged and, in all outward respects, accommodated men now are, or might be, by a given quantity of labour, is a grateful reflection which forces itself on every one. What changes, too, this

addition of power is introducing into the Social System; how wealth has more and more increased, and at the same time gathered itself more and more into masses, strangely altering the old relations, and increasing the distance between the rich and the poor, will be a question for Political Economists, and a much more complex and important one than any they have yet engaged with.

But leaving these matters for the present, let us observe how the mechanical genius of our time has diffused itself into quite other provinces. Not the external and physical alone is now managed by machinery, but the internal and spiritual also. Here too nothing follows its spontaneous course, nothing is left to be accomplished by old natural methods. Everything has its cunningly devised implements, its pre-established apparatus, it is not done by hand, but by machinery. Thus we have machines for Education: Lancastrian machines; Hamiltonian machines;¹⁰ monitors, maps and emblems. Instruction, that mysterious communing of Wisdom with Ignorance, is no longer an indefinable tentative process, requiring a study of individual aptitudes, and a perpetual variation of means and methods, to attain the same end; but a secure, universal, straightforward business, to be conducted in the gross, by proper mechanism, with such intellect as comes to hand. Then, we have Religious machines, of all imaginable varieties; the Bible-Society,¹¹ professing a far higher and heavenly structure, is found, on inquiry, to be altogether an earthly contrivance; supported by collection of moneys, by fomenting of vanities, by puffing, intrigue and chicane; a machine for converting the Heathen. It is the same in all other departments. Has any man, or any society of men, a truth to speak, a piece of spiritual work to do; they can nowise proceed at once and with the mere natural organs, but must first call a public meeting, appoint committees, issue prospectuses, eat a public dinner; in a word, construct or borrow machinery, wherewith to speak it and do it. Without machinery they were hopeless, helpless; a colony of Hindoo weavers squatting in the heart of Lancashire. Mark, too, how every machine must have its moving power, in some of the great currents of society; every little sect among us, Unitarians,

Utilitarians, Anabaptists, Phrenologists, must have its Periodical, its monthly or quarterly Magazine; – hanging out, like its wind-mill, into the *popularis aura*,¹² to grind meal for the society.

With individuals, in like manner, natural strength avails little. No individual now hopes to accomplish the poorest enterprise single-handed and without mechanical aids; he must make interest with some existing corporation, and till his field with their oxen. In these days, more emphatically than ever, 'to live, signifies to unite with a party, or to make one.' Philosophy, Science, Art, Literature, all depend on machinery. No Newton, by silent meditation, now discovers the system of the world from the falling of an apple; but some quite other than Newton stands in his Museum, his Scientific Institution, and behind whole batteries of retorts, digesters and galvanic piles imperatively 'interrogates Nature,' – who, however, shows no haste to answer. In defect of Raphaels, and Angelos, and Mozarts, we have Royal Academies of Painting, Sculpture, Music; whereby the languishing spirit of Art may be strengthened, as by the more generous diet of a Public Kitchen. Literature, too, has its Paternoster-row mechanism, its Trade-dinners, its Editorial conclaves, and huge subterranean, puffing bellows; so that books are not only printed, but, in a great measure, written and sold, by machinery.

National culture, spiritual benefit of all sorts, is under the same management. No Queen Christina, in these times, needs to send for her Descartes; no King Frederick for his Voltaire, and painfully nourish him with pensions and flattery: any sovereign of taste, who wishes to enlighten his people, has only to impose a new tax, and with the proceeds establish Philosophic Institutes. Hence the Royal and Imperial Societies, the Bibliothèques, Glyptothèques, Technothèques, which front us in all capital cities;¹³ like so many well-finished hives, to which it is expected the stray agencies of Wisdom will swarm of their own accord, and hive and make honey. In like manner, among ourselves, when it is thought that religion is declining, we have only to vote half-a-million's worth of bricks and mortar, and build new churches. In Ireland it seems they have gone still farther, having actually established a 'Penny-a-week Purgatory Society'!¹⁴ Thus does the Genius of Mechanism

stand by to help us in all difficulties and emergencies, and with his iron back bears all our burdens.

These things, which we state lightly enough here, are yet of deep import, and indicate a mighty change in our whole manner of existence. For the same habit regulates not our modes of action alone, but our modes of thought and feeling. Men are grown mechanical in head and in heart, as well as in hand. They have lost faith in individual endeavour, and in natural force, of any kind. Not for internal perfection, but for external combinations and arrangements, for institutions, constitutions, – for Mechanism of one sort or other, do they hope and struggle. Their whole efforts, attachments, opinions, turn on mechanism, and are of a mechanical character.

We may trace this tendency in all the great manifestations of our time; in its intellectual aspect, the studies it most favours and its manner of conducting them; in its practical aspects, its politics, arts, religion, morals; in the whole sources, and throughout the whole currents, of its spiritual, no less than its material activity.

Consider, for example, the state of Science generally, in Europe, at this period. It is admitted, on all sides, that the Metaphysical and Moral Sciences are falling into decay, while the Physical are engrossing, every day, more respect and attention. In most of the European nations there is now no such thing as a Science of Mind; only more or less advancement in the general science, or the special sciences, of matter. The French were the first to desert Metaphysics; and though they have lately affected to revive their school, it has yet no signs of vitality. The land of Malebranche, Pascal, Descartes and Fénelon,¹⁵ has now only its Cousins and Villemains; while, in the department of Physics, it reckons far other names. Among ourselves, the Philosophy of Mind, after a rickety infancy, which never reached the vigour of manhood, fell suddenly into decay, languished and finally died out, with its last amiable cultivator, Professor Stewart.¹⁶ In no nation but Germany has any decisive effort been made in psychological science; not to speak of any decisive result. The science of the age, in short, is physical, chemical, physiological; in all shapes

mechanical. Our favourite Mathematics, the highly prized exponent of all these other sciences, has also become more and more mechanical. Excellence in what is called its higher departments depends less on natural genius than on acquired expertness in wielding its machinery. Without undervaluing the wonderful results which a Lagrange or Laplace¹⁷ educes by means of it, we may remark, that their calculus, differential and integral, is little else than a more cunningly-constructed arithmetical mill; where the factors being put in, are, as it were, ground into the true product, under cover, and without other effort on our part than steady turning of the handle. We have more Mathematics than ever; but less Mathesis. Archimedes and Plato could not have read the *Mécanique Céleste*; but neither would the whole French Institute see aught in that saying, 'God geometrises!' but a sentimental rodomontade.

Nay, our whole Metaphysics itself, from Locke's time downwards, has been physical; not a spiritual philosophy, but a material one. The singular estimation in which his Essay¹⁸ was so long held as a scientific work (an estimation grounded, indeed, on the estimable character of the man) will one day be thought a curious indication of the spirit of these times. His whole doctrine is mechanical, in its aim and origin, in its method and its results. It is not a philosophy of the mind: it is a mere discussion concerning the origin of our consciousness, or ideas, or whatever else they are called; a genetic history of what we see in the mind. The grand secrets of Necessity and Freewill, of the Mind's vital or non-vital dependence on Matter, of our mysterious relations to Time and Space, to God, to the Universe, are not, in the faintest degree, touched on in these inquiries; and seem not to have the smallest connexion with them.

The last class of our Scotch Metaphysicians had a dim notion that much of this was wrong; but they knew not how to right it. The school of Reid¹⁹ had also from the first taken a mechanical course, not seeing any other. The singular conclusions at which Hume, setting out from their admitted premises, was arriving, brought this school into being; they let loose Instinct, as an indiscriminating bandog, to guard them against these conclu-

sions; – they tugged lustily at the logical chain by which Hume was so coldly towing them and the world into bottomless abysses of Atheism and Fatalism. But the chain somehow snapped between them; and the issue has been that nobody now cares about either, – any more than about Hartley's, Darwin's, or Priestley's contemporaneous doings in England.²⁰ Hartley's vibrations and vibratiuncles, one would think, were material and mechanical enough; but our Continental neighbours have gone still farther. One of their philosophers has lately discovered, that 'as the liver secretes bile, so does the brain secrete thought;' which astonishing discovery Dr Cabanis,²¹ more lately still, in his *Rapports du Physique et du Morale de l'Homme*, has pushed into its minutest developments.

The metaphysical philosophy of this last inquirer is certainly no shadowy or unsubstantial one. He fairly lays open our moral structure with his dissecting-knives and real metal probes; and exhibits it to the inspection of mankind, by Leuwenhoek microscopes,²² and inflation with the anatomical blow-pipe. Thought, he is inclined to hold, is still secreted by the brain; but then Poetry and Religion (and it is really worth knowing) are 'a product of the smaller intestines'! We have the greatest admiration for this learned doctor: with what scientific stoicism he walks through the land of wonders, unwondering; like a wise man through some huge, gaudy, imposing Vauxhall,²³ whose fireworks, cascades and symphonies, the vulgar may enjoy and believe in, – but where he finds nothing real but the saltpetre, pasteboard and catgut. His book may be regarded as the ultimatum of mechanical metaphysics in our time; a remarkable realisation of what in Martinus Scriblerus was still only an idea, that 'as the jack had a meat-roasting quality, so had the body a thinking quality,' – upon the strength of which the Nurembergers were to build a wood-and-leather man, 'who should reason as well as most country parsons.' Vaucanson did indeed make a wooden duck,²⁴ that seemed to eat and digest; but that bold scheme of the Nurembergers remained for a more modern virtuoso.

This condition of the two great departments of knowledge, – the outward, cultivated exclusively on mechanical principles;

the inward, finally abandoned, because, cultivated on such principles, it is found to yield no result, – sufficiently indicates the intellectual bias of our time, its all-pervading disposition towards that line of inquiry. In fact, an inward persuasion has long been diffusing itself, and now and then even comes to utterance, That, except the external, there are no true sciences; that to the inward world (if there be any) our only conceivable road is through the outward; that, in short, what cannot be investigated and understood mechanically, cannot be investigated and understood at all. We advert the more particularly to these intellectual propensities, as to prominent symptoms of our age, because Opinion is at all times doubly related to Action, first as cause, then as effect; and the speculative tendency of any age will therefore give us, on the whole, the best indications of its practical tendency.

Nowhere, for example, is the deep, almost exclusive faith we have in Mechanism more visible than in the Politics of this time. Civil government does by its nature include much that is mechanical, and must be treated accordingly. We term it indeed, in ordinary language, the Machine of Society, and talk of it as the grand working wheel from which all private machines must derive, or to which they must adapt, their movements. Considered merely as a metaphor, all this is well enough; but here, as in so many other cases, the ‘foam hardens itself into a shell,’ and the shadow we have wantonly evoked stands terrible before us and will not depart at our bidding. Government includes much also that is not mechanical, and cannot be treated mechanically; of which latter truth, as appears to us, the political speculations and exertions of our time are taking less and less cognisance.

Nay, in the very outset, we might note the mighty interest taken in *mere political arrangements*, as itself the sign of a mechanical age. The whole discontent of Europe takes this direction. The deep, strong cry of all civilised nations, – a cry which, every one now sees, must and will be answered, is: Give us a reform of Government! A good structure of legislation, a proper check upon the executive, a wise arrangement of the judiciary, is *all* that is wanting for human happiness. The Philosopher of this age is not a Socrates, a Plato, a Hooker, or Taylor, who

inculcates on men the necessity and infinite worth of moral goodness, the great truth that our happiness depends on the mind which is within us, and not on the circumstances which are without us; but a Smith, a De Lolme, a Bentham,²⁵ who chiefly inculcates the reverse of this, – that our happiness depends entirely on external circumstances; nay, that the strength and dignity of the mind within us is itself the creature and consequence of these. Were the laws, the government, in good order, all were well with us; the rest would care for itself! Dissentients from this opinion, expressed or implied, are now rarely to be met with; widely and angrily as men differ in its application, the principle is admitted by all.

Equally mechanical, and of equal simplicity, are the methods proposed by both parties for completing or securing this all-sufficient perfection of arrangement. It is no longer the moral, religious, spiritual condition of the people that is our concern, but their physical, practical, economical condition, as regulated by public laws. Thus is the Body-politic more than ever worshipped and tended; but the Soul-politic less than ever. Love of country, in any high or generous sense, in any other than an almost animal sense, or mere habit, has little importance attached to it in such reforms, or in the opposition shown them. Men are to be guided only by their self-interests. Good government is a good balancing of these; and, except a keen eye and appetite for self-interest, requires no virtue in any quarter. To both parties it is emphatically a machine: to the discontented, a ‘taxing-machine;’ to the contented, a ‘machine for securing property.’ Its duties and its faults are not those of a father, but of an active parish-constable.

Thus it is by the mere condition of the machine, by preserving it untouched, or else by reconstructing it, and oiling it anew, that man’s salvation as a social being is to be insured and indefinitely promoted. Contrive the fabric of law aright, and without farther effort on your part, that divine spirit of Freedom, which all hearts venerate and long for, will of herself come to inhabit it; and under her healing wings every noxious influence will wither, every good and salutary one more and more expand. Nay, so

devoted are we to this principle, and at the same time so curiously mechanical, that a new trade, specially grounded on it, has arisen among us, under the name of 'Codification,' or code-making in the abstract; whereby any people, for a reasonable consideration, may be accommodated with a patent code; – more easily than curious individuals with patent breeches, for the people does *not* need to be measured first.

To us who live in the midst of all this, and see continually the faith, hope and practice of every one founded on Mechanism of one kind or other, it is apt to seem quite natural, and as if it could never have been otherwise. Nevertheless, if we recollect or reflect a little, we shall find both that it has been, and might again be otherwise. The domain of Mechanism, – meaning thereby political, ecclesiastical or other outward establishments, – was once considered as embracing, and we are persuaded can at any time embrace, but a limited portion of man's interests, and by no means the highest portion.

To speak a little pedantically, there is a science of *Dynamics* in man's fortunes and nature, as well as of *Mechanics*. There is a science which treats of, and practically addresses, the primary, unmodified forces and energies of man, the mysterious springs of Love, and Fear, and Wonder, of Enthusiasm, Poetry, Religion, all which have a truly vital and *infinite* character; as well as a science which practically addresses the finite, modified developments of these, when they take the shape of immediate 'motives,' as hope of reward, or as fear of punishment.

Now it is certain, that in former times the wise men, the enlightened lovers of their kind, who appeared generally as Moralists, Poets or Priests, did, without neglecting the Mechanical province, deal chiefly with the Dynamical; applying themselves chiefly to regulate, increase and purify the inward primary powers of man; and fancying that herein lay the main difficulty, and the best service they could undertake. But a wide difference is manifest in our age. For the wise men, who now appear as Political Philosophers, deal exclusively with the Mechanical province; and occupying themselves in counting-up and estimating men's

motives, strive by curious checking and balancing, and other adjustments of Profit and Loss, to guide them to their true advantage: while, unfortunately, those same 'motives' are so innumerable, and so variable in every individual, that no really useful conclusion can ever be drawn from their enumeration. But though Mechanism, wisely contrived, has done much for man in a social and moral point of view, we cannot be persuaded that it has ever been the chief source of his worth or happiness. Consider the great elements of human enjoyment, the attainments and possessions that exalt man's life to its present height, and see what part of these he owes to institutions, to Mechanism of any kind; and what to the instinctive, unbounded force, which Nature herself lent him, and still continues to him. Shall we say, for example, that Science and Art are indebted principally to the founders of Schools and Universities? Did not Science originate rather, and gain advancement, in the obscure closets of the Roger Bacons, Keplers, Newtons; in the workshops of the Fausts and the Watts; wherever, and in what guise soever Nature, from the first times downwards, had sent a gifted spirit upon the earth? Again, were Homer and Shakspeare members of any beneficed guild, or made Poets by means of it? Were Painting and Sculpture created by forethought, brought into the world by institutions for that end? No; Science and Art have, from first to last, been the free gift of Nature; an unsolicited, unexpected gift; often even a fatal one. These things rose up, as it were, by spontaneous growth, in the free soil and sunshine of Nature. They were not planted or grafted, nor even greatly multiplied or improved by the culture or manuring of institutions. Generally speaking, they have derived only partial help from these; often enough have suffered damage. They made constitutions for themselves. They originated in the Dynamical nature of man, not in his Mechanical nature.

Or, to take an infinitely higher instance, that of the Christian Religion, which, under every theory of it, in the believing or unbelieving mind, must ever be regarded as the crowning glory, or rather the life and soul, of our whole modern culture: How did Christianity arise and spread abroad among men? Was it by institutions, and establishments and well-arranged systems of

mechanism? Not so; on the contrary, in all past and existing institutions for those ends, its divine spirit has invariably been found to languish and decay. It arose in the mystic deeps of man's soul; and was spread abroad by the 'preaching of the word,' by simple, altogether natural and individual efforts; and flew, like hallowed fire, from heart to heart, till all were purified and illuminated by it; and its heavenly light shone, as it still shines, and (as sun or star) will ever shine, through the whole dark destinies of man. Here again was no Mechanism; man's highest attainment was accomplished Dynamically, not Mechanically.

Nay, we will venture to say, that no high attainment, not even any far-extending movement among men, was ever accomplished otherwise. Strange as it may seem, if we read History with any degree of thoughtfulness, we shall find that the checks and balances of Profit and Loss have never been the grand agents with men; that they have never been roused into deep, thorough, all-pervading efforts by any computable prospect of Profit and Loss, for any visible, finite object; but always for some invisible and infinite one. The Crusades took their rise in Religion; their visible object was, commercially speaking, worth nothing. It was the boundless Invisible world that was laid bare in the imaginations of those men; and in its burning light, the visible shrunk as a scroll. Not mechanical, nor produced by mechanical means, was this vast movement. No dining at Freemasons' Tavern,²⁶ with the other long train of modern machinery; no cunning reconciliation of 'vested interests,' was required here: only the passionate voice of one man, the rapt soul looking through the eyes of one man; and rugged, steel-clad Europe trembled beneath his words, and followed him whither he listed. In later ages it was still the same. The Reformation had an invisible, mystic and ideal aim; the result was indeed to be embodied in external things; but its spirit, its worth, was internal, invisible, infinite. Our English Revolution too originated in Religion. Men did battle, in those old days, not for Purse-sake, but for Conscience-sake. Nay, in our own days it is no way different. The French Revolution itself had something higher in it than cheap bread and a Habeas-corpus act.²⁷ Here too was an Idea; a Dynamic, not a Mechanic force. It

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was a struggle, though a blind and at last an insane one, for the infinite, divine nature of Right, of Freedom, of Country.

Thus does man, in every age, vindicate, consciously or unconsciously, his celestial birthright. Thus does Nature hold on her wondrous, unquestionable course; and all our systems and theories are but so many froth-eddies or sand-banks, which from time to time she casts up, and washes away. When we can drain the Ocean into mill-ponds, and bottle-up the Force of Gravity, to be sold by retail, in gas-jars; then may we hope to comprehend the infinitudes of man's soul under formulas of Profit and Loss; and rule over this too, as over a patent engine, by checks, and valves, and balances.

Nay, even with regard to Government itself, can it be necessary to remind any one that Freedom, without which indeed all spiritual life is impossible, depends on infinitely more complex influences than either the extension or the curtailment of the 'democratic interest'? Who is there that, 'taking the high priori road,'²⁸ shall point out what these influences are; what deep, subtle, inextricably entangled influences they have been and may be? For man is not the creature and product of Mechanism; but, in a far truer sense, its creator and producer: it is the noble People that makes the noble Government; rather than conversely. On the whole, Institutions are much; but they are not all. The freest and highest spirits of the world have often been found under strange outward circumstances: Saint Paul and his brother Apostles were politically slaves; Epictetus was personally one.²⁹ Again, forget the influences of Chivalry and Religion, and ask: What countries produced Columbus and Las Casas? Or, descending from virtue and heroism to mere energy and spiritual talent: Cortes, Pizarro, Alba, Ximenes?³⁰ The Spaniards of the sixteenth century were indisputably the noblest nation of Europe; yet they had the Inquisition and Philip II. They have the same government at this day; and are the lowest nation. The Dutch too have retained their old constitution; but no Siege of Leyden, no William the Silent, not even an Egmont or De Witt any longer appears among them. With ourselves also, where much has changed, effect has nowise followed cause as it should have done:

two centuries ago, the Commons Speaker addressed Queen Elizabeth on bended knees, happy that the virago's foot did not even smite him; yet the people were then governed, not by a Castle-reagh, but by a Burghley; they had their Shakspeare and Philip Sidney, where we have our Sheridan Knowles and Beau Brummel.³¹

These and the like facts are so familiar, the truths which they preach so obvious, and have in all past times been so universally believed and acted on, that we should almost feel ashamed for repeating them; were it not that, on every hand, the memory of them seems to have passed away, or at best died into a faint tradition, of no value as a practical principle. To judge by the loud clamour of our Constitution-builders, Statists, Economists, directors, creators, reformers of Public Societies; in a word, all manner of Mechanists, from the Cartwright up to the Code-maker; and by the nearly total silence of all Preachers and Teachers who should give a voice to Poetry, Religion and Morality, we might fancy either that man's Dynamical nature was, to all spiritual intents, extinct, or else so perfected that nothing more was to be made of it by the old means; and henceforth only in his Mechanical contrivances did any hope exist for him.

To define the limits of these two departments of man's activity, which work one into another, and by means of one another, so intricately and inseparably, were by its nature an impossible attempt. Their relative importance, even to the wisest mind, will vary in different times, according to the special wants and dispositions of those times. Meanwhile, it seems clear enough that only in the right coördination of the two, and the vigorous forwarding of both, does our true line of action lie. Undue cultivation of the inward or Dynamical province leads to idle, visionary, impracticable courses, and, especially in rude eras, to Superstition and Fanaticism, with their long train of baleful and well-known evils. Undue cultivation of the outward, again, though less immediately prejudicial, and even for the time productive of many palpable benefits, must, in the long-run, by destroying Moral Force, which is the parent of all other Force, prove not less certainly, and perhaps still more hopelessly, pernicious. This, we take it, is the grand

characteristic of our age. By our skill in Mechanism, it has come to pass, that in the management of external things we excel all other ages; while in whatever respects the pure moral nature, in true dignity of soul and character, we are perhaps inferior to most civilised ages.

In fact, if we look deeper, we shall find that this faith in Mechanism has now struck its roots down into man's most intimate, primary sources of conviction; and is thence sending up, over his whole life and activity, innumerable stems, – fruit-bearing and poison-bearing. The truth is, men have lost their belief in the Invisible, and believe, and hope, and work only in the Visible; or, to speak it in other words: This is not a Religious age. Only the material, the immediately practical, not the divine and spiritual, is important to us. The infinite, absolute character of Virtue has passed into a finite, conditional one; it is no longer a worship of the Beautiful and Good; but a calculation of the Profitable. Worship, indeed, in any sense, is not recognised among us, or is mechanically explained into Fear of pain, or Hope of pleasure. Our true Deity is Mechanism. It has subdued external Nature for us, and we think it will do all other things. We are Giants in physical power: in a deeper than metaphorical sense, was are Titans, that strive, by heaping mountain on mountain, to conquer Heaven also.

The strong Mechanical character, so visible in the spiritual pursuits and methods of this age, may be traced much farther into the condition and prevailing disposition of our spiritual nature itself. Consider, for example, the general fashion of Intellect in this era. Intellect, the power man has of knowing and believing, is now nearly synonymous with Logic, or the mere power of arranging and communicating. Its implement is not Meditation, but Argument. 'Cause and effect' is almost the only category under which we look at, and work with, all Nature. Our first question with regard to any object is not, What is it? but, How is it? We are no longer instinctively driven to apprehend, and lay to heart, what is Good and Lovely, but rather to inquire, as on-lookers, how it is produced, whence it comes, whither it goes. Our

favourite Philosophers have no love and no hatred; they stand among us not to do, nor to create anything, but as a sort of Logic-mills to grind out the true causes and effects of all that is done and created. To the eye of a Smith, a Hume or a Constant,³² all is well that works quietly. An Order of Ignatius Loyola, a Presbyterianism of John Knox, a Wickliffe or a Henry the Eighth, are simply so many mechanical phenomena, caused or causing.

The *Euphuist* of our day³³ differs much from his pleasant predecessors. An intellectual dapperling of these times boasts chiefly of his irresistible perspicacity, his 'dwelling in the daylight of truth,' and so forth; which, on examination, turns out to be a dwelling in the *rush*-light of 'closet-logic,' and a deep unconsciousness that there is any other light to dwell in or any other objects to survey with it. Wonder, indeed, is, on all hands, dying out: it is the sign of uncultivation to wonder. Speak to any small man of a high, majestic Reformation, of a high, majestic Luther; and forthwith he sets about 'accounting' for it; how the 'circumstances of the time' called for such a character, and found him, we suppose, standing girt and road-ready, to do its errand; how the 'circumstances of the time' created, fashioned, floated him quietly along into the result; how, in short, this small man, had he been there, could have performed the like himself! For it is the 'force of circumstances' that does everything; the force of one man can do nothing. Now all this is grounded on little more than a metaphor. We figure Society as a 'Machine,' and that mind is opposed to mind, as body is to body; whereby two, or at most ten, little minds must be stronger than one great mind. Notable absurdity! For the plain truth, very plain, we think, is, that minds are opposed to minds in quite a different way; and *one* man that has a higher Wisdom, a hitherto unknown spiritual Truth in him, is stronger, not than ten men that have it not, or than ten thousand, but than *all* men that have it not; and stands among them with a quite ethereal, angelic power, as with a sword out of Heaven's own armory, sky-tempered, which no buckler, and no tower of brass, will finally withstand.

But to us, in these times, such considerations rarely occur. We enjoy, we see nothing by direct vision; but only by reflection, and

in anatomical dismemberment. Like Sir Hudibras, for every Why we must have a Wherefore.³⁴ We have our little *theory* on all human and divine things. Poetry, the working of genius itself, which in all times, with one or another meaning, has been called Inspiration, and held to be mysterious and inscrutable, is no longer without its scientific exposition. The building of the lofty rhyme is like any other masonry or bricklaying: we have theories of its rise, height, decline and fall, – which latter, it would seem, is now near, among all people. Of our ‘Theories of Taste,’ as they are called, wherein the deep, infinite, unspeakable Love of Wisdom and Beauty, which dwells in all men, is ‘explained,’ made mechanically visible, from ‘Association’ and the like, why should we say anything? Hume has written us a ‘Natural History of Religion;’³⁵ in which one Natural History all the rest are included. Strangely too does the general feeling coincide with Hume’s in this wonderful problem; for whether his ‘Natural History’ be the right one or not, that Religion must have a Natural History, all of us, cleric and laic, seem to be agreed. He indeed regards it as a Disease, we again as Health; so far there is a difference; but in our first principle we are at one.

To what extent theological Unbelief, we mean intellectual dissent from the Church, in its view of Holy Writ, prevails at this day, would be a highly important, were it not, under any circumstances, an almost impossible inquiry. But the Unbelief, which is of a still more fundamental character, every man may see prevailing, with scarcely any but the faintest contradiction, all around him; even in the Pulpit itself. Religion in most countries, more or less in every country, is no longer what it was, and should be, – a thousand-voiced psalm from the heart of Man to his invisible Father, the fountain of all Goodness, Beauty, Truth, and revealed in every revelation of these; but for the most part, a wise prudential feeling grounded on mere calculation; a matter, as all others now are, of Expediency and Utility; whereby some smaller quantum of earthly enjoyment may be exchanged for a far larger quantum of celestial enjoyment. Thus Religion too is Profit, a working for wages; not Reverence, but vulgar Hope or Fear. Many, we know, very many we hope, are still religious in a far

different sense; were it not so, our case were too desperate: but to witness that such is the temper of the times, we take any calm observant man, who agrees or disagrees in our feeling on the matter, and ask him whether our view of it is not in general well-founded.

Literature too, if we consider it, gives similar testimony. At no former era has Literature, the printed communication of Thought, been of such importance as it is now. We often hear that the Church is in danger; and truly so it is, – in a danger it seems not to know of: for, with its tithes in the most perfect safety, its functions are becoming more and more superseded. The true Church of England, at this moment, lies in the Editors of its Newspapers. These preach to the people daily, weekly; admonishing kings themselves; advising peace or war, with an authority which only the first Reformers, and a long-past class of Popes, were possessed of; inflicting moral censure; imparting moral encouragement, consolation, edification; in all ways diligently ‘administering the Discipline of the Church.’ It may be said too, that in private disposition the new Preachers somewhat resemble the Mendicant Friars of old times: outwardly full of holy zeal; inwardly not without stratagem, and hunger for terrestrial things. But omitting this class, and the boundless host of watery personages who pipe, as they are able, on so many scrannel straws, let us look at the higher regions of Literature, where, if anywhere, the pure melodies of Poesy and Wisdom should be heard. Of natural talent there is no deficiency: one or two richly-endowed individuals even give us a superiority in this respect. But what is the song they sing? Is it a tone of the Memnon Statue,³⁶ breathing music as the *light* first touches it? A ‘liquid wisdom,’ disclosing to our sense the deep, infinite harmonies of Nature and man’s soul? Alas, no! It is not a matin or vesper hymn to the Spirit of Beauty, but a fierce clashing of cymbals, and shouting of multitudes, as children pass through the fire to Moloch!³⁷ Poetry itself has no eye for the Invisible. Beauty is no longer the god it worships, but some brute image of Strength; which we may well call an idol, for true Strength is one and the same with Beauty, and its worship also is a hymn. The meek, silent Light can mould, create and

purify all Nature; but the loud Whirlwind, the sign and product of Disunion, of Weakness, passes on, and is forgotten. How widely this veneration for the physically Strongest has spread itself through Literature, any one may judge who reads either criticism or poem. We praise a work, not as 'true,' but as 'strong;' our highest praise is that it has 'affected' us, has 'terrified' us. All this, it has been well observed, is the 'maximum of the Barbarous,' the symptom, not of vigorous refinement, but of luxurious corruption. It speaks much, too, for men's indestructible love of truth, that nothing of this kind will abide with them; that even the talent of a Byron cannot permanently seduce us into idol-worship; that he too, with all his wild siren charming, already begins to be disregarded and forgotten.

Again, with respect to our Moral condition: here also, he who runs may read that the same physical, mechanical influences are everywhere busy. For the 'superior morality,' of which we hear so much, we too would desire to be thankful: at the same time, it were but blindness to deny that this 'superior morality' is properly rather an 'inferior criminality,' produced not by greater love of Virtue, but by greater perfection of Police; and of that far subtler and stronger Police, called Public Opinion. This last watches over us with its Argus eyes³⁸ more keenly than ever; but the 'inward eye' seems heavy with sleep. Of any belief in invisible, divine things, we find as few traces in our Morality as elsewhere. It is by tangible, material considerations that we are guided, not by inward and spiritual. Self-denial, the parent of all virtue, in any true sense of that word, has perhaps seldom been rarer: so rare is it, that the most, even in their abstract speculations, regard its existence as a chimera. Virtue is Pleasure, is Profit; no celestial, but an earthly thing. Virtuous men, Philanthropists, Martyrs are happy accidents; their 'taste' lies the right way! In all senses, we worship and follow after Power; which may be called a physical pursuit. No man now loves Truth, as Truth must be loved, with an infinite love; but only with a finite love, and as it were *par amours*. Nay, properly speaking, he does not believe and know it, but only 'thinks' it, and that 'there is every probability'! He preaches it aloud, and rushes courageously forth with

it, – if there is a multitude huzzaing at his back; yet ever keeps looking over his shoulder, and the instant the huzzaing languishes, he too stops short.

In fact, what morality we have takes the shape of Ambition, of 'Honour;' beyond money and money's worth, our only rational blessedness is Popularity. It were but a fool's trick to die for conscience. Only for 'character,' by duel, or, in case of extremity, by suicide, is the wise man bound to die. By arguing on the 'force of circumstances,' we have argued away all force from ourselves; and stand leashed together, uniform in dress and movement, like the rowers of some boundless galley. This and that may be right and true; *but* we must not do it. Wonderful 'Force of Public Opinion'! We must act and walk in all points as it prescribes; follow the traffic it bids us, realise the sum of money, the degree of 'influence' it expects of us, or we shall be lightly esteemed; certain mouthfuls of articulate wind will be blown at us, and this what mortal courage can front? Thus, while civil liberty is more and more secured to us, our moral liberty is all but lost. Practically considered, our creed is Fatalism; and, free in hand and foot, we are shackled in heart and soul with far straiter than feudal chains. Truly may we say, with the Philosopher, 'the deep meaning of the Laws of Mechanism lies heavy on us'; and in the closet, in the marketplace, in the temple, by the social hearth, encumbers the whole movements of our mind, and over our noblest faculties is spreading a nightmare sleep.

These dark features, we are aware, belong more or less to other ages, as well as to ours. This faith in Mechanism, in the all-importance of physical things, is in every age the common refuge of Weakness and blind Discontent; of all who believe, as many will ever do, that man's true good lies without him, not within. We are aware also, that, as applied to ourselves in all their aggravation, they form but half a picture; that in the whole picture there are bright lights as well as gloomy shadows. If we here dwell chiefly on the latter, let us not be blamed: it is in general more profitable to reckon up our defects than to boast of our attainments.

Neither, with all these evils more or less clearly before us, have we at any time despaired of the fortunes of society. Despair, or even despondency, in that respect, appears to us, in all cases, a groundless feeling. We have a faith in the imperishable dignity of man; in the high vocation to which, throughout this his earthly history, he has been appointed. However it may be with individual nations, whatever melancholic speculators may assert, it seems a well-ascertained fact, that in all times, reckoning even from those of the Heraclides and Pelasgi,³⁹ the happiness and greatness of mankind at large have been continually progressive. Doubtless this age also is advancing. Its very unrest, its ceaseless activity, its discontent contains matter of promise. Knowledge, education are opening the eyes of the humblest; are increasing the number of thinking minds without limit. This is as it should be; for not in turning back, not in resisting, but only in resolutely struggling forward, does our life consist.

Nay, after all, our spiritual maladies are but of Opinion; we are but fettered by chains of our own forging, and which ourselves also can rend asunder. This deep, paralysed subjection to physical objects comes not from Nature, but from our own unwise mode of *viewing* Nature. Neither can we understand that man wants, at this hour, any faculty of heart, soul or body, that ever belonged to him. 'He, who has been born, has been a First Man;' has had lying before his young eyes, and as yet unhardened into scientific shapes, a world as plastic, infinite, divine, as lay before the eyes of Adam himself. If Mechanism, like some glass bell, encircles and imprisons us; if the soul looks forth on a fair heavenly country which it cannot reach, and pines, and in its scanty atmosphere is ready to perish, – yet the bell is but of glass; 'one bold stroke to break the bell in pieces, and thou art delivered!' Not the invisible world is wanting, for it dwells in man's soul, and this last is still here. Are the solemn temples, in which the Divinity was once visibly revealed among us, crumbling away? We can repair them, we can rebuild them. The wisdom, the heroic worth of our forefathers, which we have lost, we can recover. That admiration of old nobleness, which now so often shows itself as a faint *dilettantism*, will one day become a generous emulation,

and man may again be all that he has been, and more than he has been. Nor are these the mere daydreams of fancy; they are clear possibilities; nay, in this time they are even assuming the character of hopes. Indications we do see in other countries and in our own, signs infinitely cheering to us, that Mechanism is not always to be our hard taskmaster, but one day to be our pliant, all-ministering servant; that a new and brighter spiritual era is slowly evolving itself for all men. But on these things our present course forbids us to enter.

Meanwhile, that great outward changes are in progress can be doubtful to no one. The time is sick and out of joint. Many things have reached their height; and it is a wise adage that tells us, 'the darkest hour is nearest the dawn.' Wherever we can gather indication of the public thought, whether from printed books, as in France or Germany, or from Carbonari rebellions⁴⁰ and other political tumults, as in Spain, Portugal, Italy and Greece, the voice it utters is the same. The thinking minds of all nations call for change. There is a deep-lying struggle in the whole fabric of society; a boundless grinding collision of the New with the Old. The French Revolution, as is now visible enough, was not the parent of this mighty movement, but its offspring. Those two hostile influences, which always exist in human things, and on the constant intercommunion of which depends their health and safety, had lain in separate masses, accumulating through generations, and France was the scene of their fiercest explosion; but the final issue was not unfolded in that country; nay it is not yet anywhere unfolded. Political freedom is hitherto the object of these efforts; but they will not and cannot stop there. It is towards a higher freedom than mere freedom from oppression by his fellow-mortal, that man dimly aims. Of this higher, heavenly freedom, which is 'man's reasonable service,' all his noble institutions, his faithful endeavours and loftiest attainments, are but the body, and more and more approximated emblem.

On the whole, as this wondrous planet, Earth, is journeying with its fellows through infinite Space, so are the wondrous destinies embarked on it journeying through infinite Time, under a higher guidance than ours. For the present, as our astronomy

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informs us, its path lies towards *Hercules*, the constellation of *Physical Power*; but that is not our most pressing concern. Go where it will, the deep HEAVEN will be around it. Therein let us have hope and sure faith. To reform a world, to reform a nation, no wise man will undertake; and all but foolish men know, that the only solid, though a far slower reformation, is what each begins and perfects on *himself*.

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1. p. 61 *vaticination*: prophecy.
2. p. 61 *Know'st thou yesterday . . .*: The verse is Carlyle's rendering of a verse of Goethe's, which in its turn is a paraphrase of a French poem quoted by Voltaire. Froude records that Carlyle kept Goethe's version appended to a portrait of Goethe which hung on his wall.
3. p. 61 *fatidical*: prophetic.
4. p. 61 *deliration*: delirium.

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5. p. 61 *Aaron's-rod*: According to the Old Testament, Aaron was divinely chosen amongst the Israelites to be their chief priest after the journey out of Egypt when his rod blossomed in the Tabernacle. Cf. Numbers, xvii, xviii.

6. p. 62 *The repeal of the Test Acts ... Catholic disabilities*: The Test and Corporation Acts, which had the effect of limiting the activities of Dissenters in public life, were finally repealed in 1828, while the Roman Catholic Relief Act of 1829 extended similar freedom of conscience to Roman Catholics whose liberties had been even more severely proscribed.

7. p. 63 *The Fifth-monarchy men*: A radical millenarian sect of the seventeenth century who believed that Christ's reign on earth was imminent. There was a resurgence of millenarianism at the time of the industrial revolution and in the lines that follow Carlyle would seem to have in mind the followers of Joanna Southcott, who died in 1814.

8. p. 64 *the Birmingham Fire-king has visited the fabulous East*: The implications of this reference are obvious enough; its source has proved far more elusive. I am indebted to Mr Eugene Ferguson of the University of Delaware for the suggestion that it refers to the voyage of the Steamship *Enterprize* which sailed from Gravesend to Calcutta in 1825, passing via the Cape of Good Hope. There was considerable interest in the exploitation of steam power on ocean routes at this time and the *Enterprize* was the first steamship to travel from England to the Far East. Steam engines would naturally be associated with Birmingham in the public mind and the voyage of the *Enterprize*, which aroused considerable public interest, could well have been regarded by Carlyle as symbolic of the development of engineering science.

9. p. 64 *Camoens*: The Portuguese poet Camoens, in his epic poem the *Lusiad* (1572), celebrated the voyage of Vasco da Gama around the Cape to India.

10. p. 65 *Lancastrian machines; Hamiltonian machines*: Joseph Lancaster (1778–1838) was a pioneer of primary education who outlined his methods in *Improvements in Education* (1803). He was particularly noted for his advocacy of the monitorial system, by which the elder pupils taught the younger in their turn. James Hamilton (1769–1831) devised a system of language teaching involving direct confrontation with inter-linear translations rather than a formal grammatical approach. This, he argued, led to earlier proficiency.

11. p. 65 *the Bible-Society*: The British and Foreign Bible Society, founded by a group of Evangelicals in 1804 for the printing and free distribution of Bibles. It aroused considerable opposition from the Anglican establishment whose own society, the Society for the Propagation of Christian Knowledge, had lost its effectiveness.

12. p. 66 *popularis aura*: Normally translated as 'the popular favour', more generally, 'public opinion'.

13. p. 66 *The Bibliothèques, Glyptothèques, Technothèques, which front us all in capital cities*: Carlyle is ridiculing the numerous educational institutions that were springing up at this time as a consequence of utilitarian enthusiasm for the systematization and dissemination of knowledge. A 'Glyptothèque' is, literally, an institution devoted to the art of carving or engraving hence, presumably, an art-school.

14. p. 66 '*Penny-a-week Purgatory-Society*': This sounds very like a hire-purchase arrangement for obtaining indulgences, but I have been unable to trace the reference.

15. p. 67 *Malebranche, Pascal, Descartes and Fénelon... Cousins and Villemains*: Carlyle is making a derogatory comparison between contemporary French intellectuals and the giants of the past. Victor Cousin (1792-1867) attempted a popularized synthesis of previous philosophic systems which he believed would provide a practical basis upon which life could be conducted. Abel-Francois Villemain (1790-1867) was an essayist whose open-mindedness on literary topics may have seemed to Carlyle indiscriminating.

16. p. 67 *Professor Stewart*: See n. 19 below.

17. p. 68 *a Lagrange or Laplace*: Joseph-Louis Lagrange (1736-1813) and Pierre-Simon Laplace (1749-1827) were French mathematicians who applied mathematics to the study of the solar system. Laplace was the more important of them and in his *Mécanique Céleste* he declared his aim to be 'to solve the great mechanical problems of the solar system and to bring theory to coincide so closely with observation that empirical equations should no longer be needed'. When asked by Napoleon where God fitted into his system he is reputed to have replied: 'I have no need of such an hypothesis.'

18. p. 68 *his Essay*: i.e. Locke's *Essay concerning Human Understanding* (1690).

19. p. 68 *The school of Reid*: This Scottish philosophical movement was popularly called the 'school of common sense' since, while it was based on the scientific study of human psychology, it attempted

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to evade the extreme scepticism of Hume, as revealed in his *Treatise of Human Nature* (1739-40), by asserting a practical attitude towards the problems of perception. Its chief exponent was Thomas Reid (1710-96) Professor of Moral Philosophy at the University of Glasgow; his disciple Dugald Stewart (1753-1828) held a similar post at Edinburgh.

20. p. 69 *Hartley's, Darwin's or Priestley's contemporaneous doings in England*: David Hartley (1705-57) developed the theory of the Association of Ideas by which he explained, in mechanistic terms, the development of the moral sense out of basic human sensations. He explained all mental phenomena by the existence of 'vibratiuncles' or minute nervous vibrations. His influence on Wordsworth, and more particularly Coleridge, was considerable. Erasmus Darwin (1731-1802) sought to demonstrate that living things become adapted to their environment, and Joseph Priestley (1733-1804) is noted for his investigations of the properties of gases and his scientific demonstration of the respiratory systems of plants.

21. p. 69 *Dr Cabanis*: Pierre-Jean-Georges Cabanis (1757-1808), physiologist, psychologist and philosopher, argued for a physiological explanation of all mental processes: his dictum quoted here by Carlyle was famous and exemplifies the tendencies of his deductions. He went on to argue that the relationship between body and mind, properly developed, was reciprocal; thus as man's scientific knowledge developed his passions might be more effectively controlled, a theory which had considerable appeal for French positivist philosophers like Saint-Simon and Comte. Cabanis's *Rapports du Physique et du Morale de l'Homme*, ridiculed here by Carlyle, was his most famous work and was published in 1802.

22. p. 69 *Leuwenhoek microscopes*: The early nineteenth century saw a considerable improvement in the efficiency of microscopes, which contributed to the extensive interest in natural history at that time. Antony van Leuwenhoek (1632-1723), a Dutchman, was a pioneer in the field of microscopic investigation.

23. p. 69 *Vauxhall*: At Vauxhall, on the south bank of the Thames, there were extensive pleasure-gardens 'where people might roam on a fine evening, eating, drinking, flirting, copulating, watching fireworks or lantern displays'. (Lewis Mumford, *The City in History*.) The gardens reached a peak of popularity in the late eighteenth and early nineteenth centuries.

24. p. 69 *what in Martinus Scriblerus was only an idea... Vaucan-*

son did indeed make a wooden duck: In Chapter 12 of the *Memoirs of Martinus Scriblerus*, a satirical pseudo-autobiography under the joint authorship of Arbuthnot, Pope, Swift and Gay, various free-thinking mechanistic theories of human nature were parodied. The culmination of the chapter describes how a 'Virtuoso at Nuremberg' plans to construct a robot which will be inspired with human consciousness, much as a spit, which is simply a machine, has within it the power to roast meat. Fantasy came close to fact when Jacques de Vaucanson (1709-82), a French inventor who applied himself to the construction of mechanical representations of living creatures, made a duck which paddled, pecked at grain and apparently digested it through a mechanical process imitative of the action of the digestive organs.

25. p. 71 *a Smith, a De Lolme, a Bentham*: Adam Smith, the first systematic economist, John De Lolme, a constitutional theorist, and Jeremy Bentham, the founding father of English utilitarianism, are grouped together as representative of the general intellectual malaise. The reputations of Smith and Bentham have of course survived: that of De Lolme has not, although his *Constitution of England* (1771) enjoyed considerable contemporary success. Its basic thesis was that the freedom of the constitution depended on the balance of its different parts, a mechanistic argument that Carlyle would have certainly found objectionable.

26. p. 74 *No dining at Freemasons' Tavern*: The Freemasons' Tavern was the meeting-place of a Debating Society organized by, among others, John Stuart Mill. The society's first meeting was in 1825 and it attracted many prominent intellectuals. Its activities are described in Mill's *Autobiography*, Ch. 4.

27. p. 74 *cheap bread and a Habeas-corpus act*: The inflated price of bread, consequent upon the imposition of the Corn Laws, and the repeated suppression of Habeas Corpus were amongst the strongest grievances of Radical opinion in the early nineteenth century.

28. p. 75 *'taking the high priori road*: cf. Pope, *Dunciad*, Book IV, 11.471-2:

We nobly take the high Priori road
And reason downward, till we doubt of God.

An 'a priori' argument is an argument based on pure reason as distinct from one deduced from empirical observation.

29. p. 75 *Epictetus was personally one*: The stoicism of Epictetus,

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who asserted the importance of the individual will and the irrelevance of external circumstances, would have had considerable attractions for Carlyle. Epictetus was originally a slave, although his master, an important Roman official, later set him free.

30. p. 75 *What countries produced Columbus and Las Casas? Or... Cortes, Pizarro, Alba, Ximenes?*: The answer in each case is either Portugal or Spain, although to be strictly accurate Columbus, of course, was Genoese.

31. p. 76 *Sheridan Knowles and Beau Brummel*: James Sheridan Knowles was an Irish actor-dramatist who achieved considerable success in the 1820s, Hazlitt speaking of him as the first tragic author of the time. Carlyle, whose judgement in this instance seems to have been more acute, ironically compares him with Shakespeare, and Beau Brummel, the celebrated dandy, with Sir Philip Sidney.

32. p. 78 *a Smith, a Hume or a Constant*: cf. notes 19 and 25 above. Benjamin Constant (1767-1830) was a politician and man of letters. His '*De la religion considérée dans sa source, ses formes et ses développements*' (1824-30) is probably the work which has called him to Carlyle's attention here.

33. p. 78 *The Euphuist of our day*: i.e. the intellectual sophisticate. Lyly's *Euphues* (1578-80) is celebrated for its high-flown style.

34. p. 79 *Like Sir Hudibras, for every Why we must have a Wherefore*: Sir Hudibras is the hero of a satirical poem by Samuel Butler (1612-80):

He understood b'implicit faith
Whatever Sceptic would enquire for
For every WHY he had a WHEREFORE.

(Canto I, 11. 130-32) i.e. he answered one question by asking another and was thus involved in an endless chain of inquiry.

35. p. 79 *Hume has written us a 'Natural History of Religion'*: In the work referred to, which was published in 1757, Hume subjected religion to his processes of sceptical historical analysis, remarking in the introduction that 'There is a great difference between historical facts and speculative opinions'.

36. p. 80 *a tone of the Memnon statue*: The stones of the Colossi of Memnon at Abydos in ancient Egypt were reputed by the Romans to sing at dawn.

37. p. 80 *as children pass through the fire to Moloch*: Moloch was a heathen god referred to several times in the Old Testament whose

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rites involved the subjection of children to an ordeal by fire. Cf. particularly *Leviticus* xx, 2-5.

38. p. 81 *Argus eyes*: Argus was a mythological monster who had numerous eyes, some of them in the back of his head, and thus could not be surprised.

39. p. 83 *reckoning even from those of the Heraclides and the Pelasgi*: These two tribes are part of the pre-history of ancient Greece. The Heraclides were the mythological ancestors of the Dorian invaders of Greece and the Pelasgians were pre-Hellenic inhabitants of the country.

40. p. 84 *Carbonari rebellions*: The Carbonari were members of a secret revolutionary movement which extended throughout Mediterranean Europe and was at its most powerful in 1820-21 when a series of insurrections, unsuccessful in France, but temporarily successful in Spain, Greece and some Italian states, occurred.